8351
WIRE DRAG

Diag. Cht. No. 1232-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey WIRE DRAG INVESTIGATION

Field No. PBS-4455WD *Office No.* H-8351

LOCALITY

State North Carolina

General locality Atlantic Ocean

Locality Cape Hatteras

19~~4~~55

CHIEF OF PARTY

John C. Mathisson

LIBRARY & ARCHIVES

DATE April 15, 1957

B-1870-1 (1)

8351
WIRE DRAG

Form 537
(Ed. June 1946)

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER No. H-8351WD

Field No. PBS-4455WD

State NORTH CAROLINA

General locality ATLANTIC OCEAN

Locality CAPE HATTERAS

Scale 1:40,000 Date of survey 2 June to 2 Aug. 1955

Instructions dated 28 Jan. 1955

Vessel SHIPS PARKER, BOWEN & STIRNI

Chief of party JOHN C. MATHISSON

Surveyed by JOHN C. MATHISSON, J.R. PLAGGMIER, H.J. SEABORG
D.G. RUSHFORD, C.R. REED, W.R. KACHEL

Soundings taken by ~~XXXXXXXXX~~, graphic recorder, ~~XXXXXXXXXX~~

Fathograms scaled by FIELD PARTY

Fathograms checked by FIELD PARTY

Protracted by FIELD PARTY

DRAG STRIPS INKED BY:
~~Soundings penciled by~~ HUGH L. PROFFITT

Soundings in ~~XXXXXX~~ feet at MLW ~~XXXXX~~ and are true depths

REMARKS:

U. S. GOVERNMENT PRINTING OFFICE 16—66520-1

Field Notes for Descriptive Reports to Accompany 1955
Wire Drag and Hydrographic Sheets - Ships PARKER, BOWEN, STIRNI -
Cdr. John C. Mathisson, Chief of Party

A. PROJECT - Original instructions for Project No. CS-377 addressed to the Commanding Officer of the Ships PARKER, BOWEN, and STIRNI are dated 28 January 1955. Project number was later changed to 1377.

B. SURVEY LIMITS AND DATES - The following sheets are included in the 1955 seasons work of the Ships PARKER, BOWEN, and STIRNI.

(a.) Hydrography and Wire Drag: PBS2255 (H-8247) Cape Lookout Shoals - North End
PBS 2355 (H-8248) Cape Lookout Shoals - South End

(b.) Hydrography: PBS 2455 (H-8249) Diamond Shoals

(c.) Wire Drag:
PBS-4155 W.D. South of Cape Lookout, N. C.
PBS-4255 W.D. East of Cape Lookout, N.C.
PBS-4355 W.D. Off Ocracoke Inlet, N.C.
PBS-4455 W.D. Cape Hatteras, N.C.
PBS-4555 W.D. Northeast of Cape Hatteras, N.C.
PBS-4655 W.D. Offshore - East of Cape Fear, N.C.
PBS-4755 W.D. Inshore - East of Cape Fear, N.C.

(d.) Reconnaissance Hydrography: PBS-4855 - Offshore - Southeast of Cape Lookout, N.C.

No work was accomplished on sheet PBS-2155 W.D. - Northwest of Cape Henry, Virginia.

A special hydrographic investigation was made in Core Sound, north of Ocracoke Inlet. It is the subject of a special report previously submitted.

A special wire drag investigation was made in the Pasquotank River, ~~Virginia~~ N.C. This is also the subject of a special report already forwarded.

Plotting of the wire drag boat sheets was not completed in the field. Shoalest hangs and deepest clearances on wrecks will have to be determined after plotting has been completed. Wreck letters submitted during the field season give preliminary values based on predicted tides and approximate lifts.

A comparison of boat sheet depths with charted depths in the case of hydrographic sheets serves no useful purpose at this time. The comparison should be made after the completion of the smooth sheets.

SHORAN CORRECTIONS:

The shoran equipment in all three vessels was calibrated at frequent intervals during the season. Three "Dinoplex" calibration sheets were used. One each in the vicinities of Cape Hatteras, Cape Lookout, and Cape Fear. Calibrations were taken each time the shoran stations were moved and at other intervals when thought necessary.

Once a shoran correction was determined, this correction was applied to all shoran readings until a new calibration was taken. The new connection was then applied to all subsequent shoran readings. Zero checks were made at the time of each calibration and at frequent intervals while using shoran control. No abnormal deviation from the zero set was found.

A tabulation of the shoran corrections used for the through ships follows: Shoran corrections were rounded off to the nearest 0.005 mile when entering corrections in volumes.

Tabulation of Shoran Calibrations - STIRNI:

Date	Recorded in Vol. Sheet No.	Monitor No.	Sta. 36	Corr'n	Sta. 37	Corr'n
4-26-55	2255	1	SAM	-0.021	KNOL	+0.012
5-9-55	8155 FE II(1951)	1	SAM	+0.001	KNOL	+0.010
5-25-55	8155	1	SAM	+0.002	KNOL	-0.009
6-3-55	4455	1	CLUB	+0.007	PEA	-0.045
6-6-55	4455	2	CLUB	+0.008	PEA	-0.016
7-22-55	2455	2	CLUB	+0.061 (r)	PEA	+0.021 (r)
7-28-55	4355	2	CLUB	-0.031	LOLA	-0.029
8-31-55	4255	2	SAM	+0.004	LOLA	-0.019
9-26-55	4155	2	DEY	-0.040	KNOL	-0.030
10-20-55	4755	2	SURF	-0.008	OAK	-0.034
		PARKER:				
		1	SAM	-0.003	KNOL	-0.026
4-18-55	2355	2	SAM	-0.016	KNOL	-0.008
4-27-55	2355	1	SAM	-0.009	KNOL	-0.011
5-25-55	4155	1	SAM	-0.008	KNOL	-0.016
5-31-55	2455	1	CLUB	-0.020	PEA	-0.055
6-6-55	4555	2	CLUB	-0.001	PEA	-0.032
7-22-55	4455	2	CLUB	-0.023	PEA	-0.032
7-28-55	4455	2	CLUB	-0.004	LOLA	-0.034
8-31-55	4255	2	SAM	-0.001	LOLA	-0.042
9-28-55	4155	2	DEY	-0.015	KNOL	-0.043
10-18-55	4755	2	SURF	-0.061	OAK	-0.022

Tabulation of Shoran Corrections Entered in Volumes - STIRNI:

		Sta. 36	Sta. 37
Begin season thru 5-8-55		-0.020 (SAM) (Set #1)	+0.010 (KNOL) (Set #1)
5-9-55 - 6-1-55		0.000 (SAM) "	+0.010 (KNOL) "
6-2-55 - 6-5-55		+0.005 (CLUB) "	-0.045 (PEA) "
6-6-55 - 7-28-55		+0.010 (CLUB) Set #2	-0.015 (PEA) Set #2
7-29-55 - 8-5-55		-0.030 (CLUB) "	-0.030 (LOLA) "
8-6-55 - 9-25-55		+0.005 (SAM) "	-0.020 (LOLA) "
9-26-55 - 10-5-55		-0.040 (DEY) "	-0.030 (KNOL) "
10-6-55 - Season End		-0.010 (SURF) "	-0.035 (OAK) "
		PARKER:	
4-18-55	0900 - 1130	-0.005 (SAM) (Set #1)	-0.015 (KNOL) (SET #1)
	1401 - 1520	-0.015 (SAM) (Set #2)	-0.010 (KNOL) (Set #2)
	1520 - 1650	-0.005 (SAM) (Set #1)	-0.015 (KNOL) (Set #1)
	1650 - end	-0.015 (SAM) (Set #2)	-0.010 (KNOL) (Set #2)
4-19-55 - 5-2-55 at 10:55		-0.005 (SAM) (Set #1)	
5-2-55	1055-1115	-0.015 (SAM) (Set #2)	
	1115-end	-0.005 (SAM) (Set #1)	
4-19-55 - 4-26-55	1600		-0.015 (KNOL (Set #1)
4-26-55	1600 - 1650		-0.010 (KNOL) (Set #2)
	1650 - End		-0.015 (KNOL) (Set #1)

	Sta. 36	Sta. 37
5-3-55 - 5-25-55	-0.005 (SAM)(Set #1)	
4-27-55 - 5-25-55		-0.015 (KNOL)(Set #1)
5-31-55 - 6-5-55 1300	-0.020 (CLUB)(Set #1)	
6-5-55 1300-1945	-0.015 (CLUB)(Set #2)	
5-31-55- 6-7-55		-0.045 (PEA)(Set #1)
6-13-55 - 7-23-55		-0.040 (PEA)(Set #2)
6-6-55 - 6-14-55 1400	-0.015 (CLUB)(Set #2)	
6-14-55 1400 to end	-0.020 (CLUB)(Set #1)	
7-26-55 - 9-2-55		-0.040 (LOLA)(Set #2)
6-15-55 - 8-4-55	-0.015 (CLUB)(Set #2)	
9-7-55 - 10-5-55		-0.045 (KNOL)(Set #2)
8-8-55 - 9-18-55	0.000 (SAM)(Set #2)	
9-21-55 - 10-4-55	-0.015 (DEY)(Set #2)	
10-5-55 - 10-27-55	-0.060 (SURF)(Set #2)	
10-6-55 - 10-25-55		-0.020 (OAK)(Set #2)
8,12,&28 July 1955	STIRNI as Shore Station (STIR I, STIR II, STIR III)	-0.020

BOWEN:

4-18-55 0900 - 1130	-0.020 (SAM)(Set #1)	∕0.005 (KNOL)(Set #1)
1130 - 1345	-0.015 (SAM)(Set #2)	∕0.005 (KNOL)(Set #2)
1345 - End	-0.020 (SAM)(Set #1)	∕0.005 (KNOL)(Set #1)
4-19-55 - 4-20-55	-0.020(SAM)(Set #1)	∕0.005 (KNOL)(Set #1)
4-21-55 - 5-2-55 1055	∕0.010(SAM(Set #1)	
1055-1115	∕0.005 (SAM)(Set #2)	
5-2-55 1115-end	∕0.010 (SAM)(Set #1)	
4-19-55 - 4-26-55 at 1600		-0.005 (KNOL)(Set #1)
1600 - 1650		∕0.005 (KNOL)(Set #2)
4-26-55 1650 - end		-0.005 (KNOL)(Set #1)
4-27-55 - 5-25-55		-0.005 (KNOL)(Set #1)
5-3-55 - 5-25-55	∕0.010 (SAM)(Set #1)	
5-31-55 - 1300 6-5-55	-0.010 (CLUB)(Set #1)	
6-5-55 - 1300 - end	-0.010 (CLUB)(Set #2)	
5-31-55 - 6-7-55		-0.040 (PEA)(Set #1)
6-13-55 - 7-23-55		-0.015 (PEA)(Set #2)
6-6-55 - 1400 6-14-55	-0.010 (CLUB)(Set #2)	
6-14-55	-0.010 (CLUB)(Set #1)	
-15-55 - 8-4-55	-0.010 (CLUB)(Set #2)	
7-26-55 - 9-2-55		-0.025 (LOLA(Set #2)
8-8-55 - 9-18-55	∕0.010 (SAM)(Set #2)	
9-7-55 - 10-04-55		-0.015 (KNOL)(Set #2)
9-21-55 - 10-4-55	-0.005 (DEY)(Set #2)	
10-5-55 - 10-27-55	-0.035 (SURF)(Set #2)	-0.015 (OAK)(Set #2)

Settlement and Squat Corrections:

The settlment and squat corrections were the same as used in previous years for all three ships. The correction depending upon the speed and the water depth. Tabulation of corrections follows:

(Next Page)

SETTLEMENT & SQUAT CORRECTIONS (ALL ⊀)

PBS

SPEED (RPM)	CORRECTION (FEET)	FROM DEPTH TO DEPTH (FEET)
400	0.2	all depths
450	0.2	all depths
500	0.2	all depths
600	0.4	6.0 to 14.5
	0.2	15.0 and over
650	0.4	11.5 to 17.0
	0.2	17.5 and over
700	0.6	12.5 to 15.0
	0.4	15.5 to 19.5
	0.2	20.0 and over
750	0.8	12.5 to 14.0
	0.6	14.5 to 16.5
	0.4	17.0 to 21.5
	0.2	22.0 to 31.5
	0.4	32.0 and over
800	1.0	12.5 to 13.0
	0.8	13.5 to 15.5
	0.6	16.0 to 19.0
	0.4	19.5 and over
850	1.0	12.5 to 13.5
	0.8	14.0 to 16.5
	0.6	17.0 to 22.5
	0.4	23.0 and over
900	1.0	12.5 to 14.5
	0.8	15.0 to 20.5
	0.6	21.0 to 34.0
	0.4	34.5 and over
1000	1.0	6.0 to 21.5
	0.8	22.0 to 31.5
	0.6	32.0 and over

TIDES:

Final tides were either furnished by the Washington Office for the periods needed, or were tabulated in the field from observed tides.

Tide reducers for the Cape Hatteras Area were based on tide staff readings for Hatteras Inlet (Outside).

Tide reducers for the Cape Lookout Area were based on the portable gage installed at Lookout Bight.

Tide reducers for the Cape Fear Area were interplated by the Washington Office, Division of Tides and Currents.

All tide reducers were referred to the plane of mean low water.

On the hydrographic surveys, tide reducers were entered to 0.2 ft. On the wire drag surveys, tide reducers were intered to 0.5 feet.

ECHO CORRECTIONS:

The echo corrections for all three ships were determined by bar checks at intervals during the season. Standard methods were used and the leadlines on the bars were checked and found to be the correct length so no correction was necessary to leadline lengths.

Bar checks were not taken as often as would be expected for a hydrographic party due to the nature of operations and lack of suitable weather along the open coast. However, sufficient tests were made to provide accurate corrections for the various fathometers and scales.

The Edo fathometer on the STIRNI was not used for hydrographic work, but was tested and separate reports submitted to the Washington Office on 30 September 1955 and 20 June 1956.

On the BOWEN and STIRNI fathometers No. 160SPX, 100S and 161SPX the corrections on the A scale varied with the depths and were so entered. On the PARKER fathometer No. 1175, the A scale corrections were uniform regardless of depth so one correction for the entire A scale was determined and used. On the B, C, and D scales of all fathometers, a single correction was determined for each scale.

On the PARKER, fathometer No. 1175 no D scale correction could be determined as no return could be gotten from the bar at that depth in D scale. On the PARKER, the D scale was used only for a few soundings during the following periods:

6 June 1955 Sheet PBS-4455 Vol. I Position 8 on B day
12 July 1955 Sheet PBS-4455 Vol. II Pos. 46 to 49 on D day
12 July 1955 Sheet PBS-4455 Vol. II Pos. 57 to 62 on D day

On 11 June 1956, a bar check was obtained under ideal conditions and one check on the D scale at 110 feet was obtained. The correction was -2.0 feet. It is suggested that this correction be used in the above few positions. These positions had no correction entered in the Volumes at the time the volumes were transferred to the Norfolk District Office.

A tabulation of the corrections applied to the fathometer soundings follows:

A. PARKER — Fath. No. 1175 Type 808

A scale	-0.2 feet
B scale	-0.6 feet
C scale	-0.2 feet
D scale	See Report*

B. BOWEN — Fath. No. 160SPX Type 808

A scale	-0.2 feet.	0 to 16.9 ft.
	0.0 ft.	to 27.2 ft.
	∠0.2 ft.	to 33.8 ft.
	∠0.4 ft.	to 39.4 ft.
	∠0.6 ft.	to 45.2 ft.
	∠0.8 ft.	to 50.9 ft.
	∠1.0 ft.	to 55.0 ft.
B Scale	∠1.5 ft.	to 57.8 ft.
	∠2.0 ft.	to 90.0 ft.
C Scale	∠2.5 ft.	
D Scale	∠2.5 ft.	

Fath. No. 100S Type 808

A Scale	0.0 ft.	to 22.0 ft.
	∠0.2 ft.	to 35.5 ft.
	∠0.4 ft.	to 48.9 ft.
	∠0.6 ft.	to 55.0 ft.
B Scale	∠1.0	
C Scale	∠1.5	

C. STIRNI — Fath. No. 161 SPX Type 808

A Scale	0.0 ft.	0 to 13.5 ft.
	∠0.2 ft.	to 24.0 ft.
	∠0.4 ft.	to 33.0 ft.
	∠0.6 ft.	to 42.5 ft.
	∠0.8 ft.	to 49.0 ft.
	∠1.0 ft.	to 55.0 ft.
B Scale	0.0 ft.	
C Scale	-2.5 ft.	
D Scale	-4.5 ft.	

PROCESSING OFFICE

WIRE DRAG CLEARANCES

PBS-4455WD

WRECK NO.	HUNG	CLEARED	SDG.
638 φ35°15.26', λ75°20.35'	-	area cleared 50 to 62 ft.	- Wk not found.
410 (H.O.Pos. φ35°11.8' λ75°15.3' C&GE Pos. φ35°13.0 λ75°14.0')	-	area cleared 55 to 56 ft.	- Wk not found
422 φ35°05.7 λ75°34.9'	-	area cleared 66 & ~~67~~ 76 ft.	- Wk. not found.
436 & 134	83'	70' (φ35°13.72', λ75°12.10')	76' (Obstruction)
412	-	~~48'~~ 52'	- Wk found (a) (See Review)
411 φ35°10.24', λ75°21.52'	40'	36'	45'
858 35°08.0', λ75°22.0'	-	47'	- Wk not found
414 35°07.3' λ75°22.05'	-	46'	- Wk not found
437 35°04.82 λ75°23.46'	89'	77'	-(See Review)
445 φ35°01.84', λ75°28.60'	-	101'	102'
413 φ35°09.4', λ75°31.94'	-	area cleared 31 to 46'	- Wk, not found
Item 2A (Maybe Wk. "Half Moon") φ35°13.16 λ75°37.94'		- Area was not w.d.-sdg only	16' (Echo Sounder) (See Review)
*Item 3A (Monitor) φ35°15.8' λ75°29.8'	-	area cleared 23 to 29'	- Wk not found ("Monitor")
Item 4A (Not Plotted) φ35°05.16, λ75°19.34'	See Tender Record, pg. 45 [5 S(green) & 19 P(blue)]		(See Review)

*Also cleared with drag towing on bottom.

a Wk 417 Sonar Contacts (C.L. 59?, 19?) { φ35°09.6', λ75°18.15' = sdg. 64 ft; Pos. φ35°09.40', λ75°18.24' = sdg. 61 ft. } area cleared by 52 ft.

FLOATING AIDS TO NAVIGATION

PBS-4455WD

BUOY	LAT.	LONG.	SDG.	POS. NO.	DATE
CAPE HATTERAS					
Buxton Wreck Ltd.* Whistle Buoy	35-09.98	75-18.04	-	1R(green)	7/20/55
Buxton Wreck Nun* Buoy	35-09.98	75-17.96	-	2R(green)	7/20/55
Diamond Wreck Ltd.* Bell Buoy 10A	35-10.68	75-21.26	-	1A(blue)	6/2/55
Diamond Shoal L.S.* Marker Buoy	35-05.18	75-19.34	-	19P(blue)	7/12/55
Outer Shoal Wreck* Buoy	35-01.75	75-29.39	-	1K(blue)	6/28/55

* Not charted on Chart 1232 (8-26-57)

PROCESSING OFFICE
ADDENDUM
To Accompany

WIRE DRAG FIELD INVESTIGATION PBS-4455WD

GENERAL

All drag strips and effective depths were inked on the boat sheet, by the Processing Office according to the diagrams in the volumes. The sheets were received from the field party with only the paths of "N" and "F" buoys pricked. The field plotting was accepted in all instances with the exception of detached positions locating hangs, aids to navigation etc. In these instances the positions were re-plotted using the final shoran corrections.

Groundings were only plotted on the boat sheet when the drag came to a complete stop. Numerous instances were recorded where the drag was noted to be aground but continued to tow along. These groundings could not be plotted accurately because of the lack of notes concerning the times of groundings and clears. In any event, this is not considered important as the primary purpose of the survey was to locate wrecks and obstructions.

Several splits occurred and have been noted on the sheet in pencil.

CONTROL

It is apparent from the records that Ship STIRNI, on two occasions was anchored just East of Cape Hatteras Light and used as a shoran station. Curves from these stations were inked on the sheet and labeled STIRNI 2 and STIRNI 3.

Norfolk, Va.
5 April 1957

Respectfully submitted,

Hugh L. Proffitt
Cartographer.

GEOGRAPHIC NAMES

Survey No. H-8351W.D.

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
										1
										2
										3
										4
										5
										6
										7
										8
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										10
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										27

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8351 W.D.

Records accompanying survey:

Boat sheets .1...; sounding vols. .8...; wire drag vols. .8...;

bomb vols. .....; graphic recorder rolls 7; 6-Envelopes

special reports, etc. .1-Descriptive report..1-Smooth sheet....

.and 1-Hydrography Overlays.....

The following statistics will be submitted with the cartographer's report on the sheet:

		Hyd	WD
Number of positions on sheet		1006	687
Number of positions checked		105	
Number of positions revised		4	
Number of soundings revised (refers to depth only)		7	
Number of soundings erroneously spaced		0	
Number of signals erroneously plotted or transferred		0	
Topographic details	Time	0	
Junctions	Time	0	
Verification of soundings from graphic record	Time	2	

Verification by Jan Beskind .....Total time 7.7.... Date Sept 3, 1957

Reviewed by Jan Beskind ..... Time 23 ..... Date Sept 6, 1957

M-2232-1

REVIEW OF H-8351 W. D. (1955)

This wire-drag survey was made in compliance with the Director's Instructions for Project C. S.-377, dated 28 January 1955. The purpose of the survey was to locate and determine the least depths over wrecks Nos. 134, 410, 411, 412, 413, 414, 422, 436, 437, 445, 638, 858, items 2 A, 3 A and 4 A, which lie in the Atlantic Ocean east, southeast and south of Cape Hatteras, N. C.

The survey consists of both wire-drag and reconnaisance hydrography. The depths obtained on the sounding lines are in harmony with the effective wire-drag depths. The sounding lines are plotted on sections of tracing paper and one section of boat sheet paper, which accompany this survey.

Wire-drag investigations of the reported positions of the wrecks listed in the above-mentioned Project Instructions revealed the following:

1. Wrecks Nos. 410, 413, 414, 422, 638 and 858 and item 3 A were not found.

2. Obstructions were found in the vicinities of wrecks 134, 411, 412, 436, 437 and 445 and items 2 A and 4 A.

The following additional information is given concerning several obstructions mentioned in paragraph 2 above:

Item 2 A. A 16-ft. sounding was obtained in lat. 35° 13.16, long. 75° 37.92'. The area was not covered by wire drag. A note in the wire-drag volumes states the 16-ft. sounding was probably obtained on the wreck "Half Moon", a 70-ft. fishing trawler, which sank in August, 1955.

Item 4 A. A sunken wreck was reported to be located nearby the Diamond Shoals Lightship marker bouy in lat. 35° 05.16' long. 75° 19.34', by personnel of the Diamond Shoals Lightship. (See vol. 5, pg. 45-Stirni). The field party states that Sonar contact was lost upon close approach to the wreck.

The results of the wire-drag examination are tabulated on the Wire-Drag Clearance sheet in the Descriptive Report, and are plotted on the wire-drag smooth sheet.

The work was applied to chart 1232 dated 26 August. 1957, from advance information of the present survey. A comparison between the present survey and chart 1232, shows the effective wire-drag depths to be in harmony with the charted depths, except as follows:

1. The cleared effective wire-drag depth of 73 ft. charted over the wrecks 134 and 436 in lat. 35° 13.72'. long. 75° 12.10', was revised to 70 ft. during the verification and review of the present survey.

1232 1000 LNM HAP 3/4/1-8 OS

2. The cleared effective wire-drag depth of 78 ft. charted over wreck 437 in lat. 35° 04.85', long. 75° 23.43', was revised to 77 ft. during the verification and review of the present survey.

1232 1000 No corr

3. Wreck 412 charted in lat. 35° 09.41', long. 75° 18.25' shown as cleared by a wire-drag set to an effective depth of 48 ft., originates with advance information of the present survey. (Chart letter 597, 1955). The chart letter reports sonar contacts of 64 ft. and 61 ft. were made in lat. 35° 09.60', long. 75° 18.15', and lat. 09.40', long. 75° 18.24', respectively. The area over the contacts was cleared by a wire-drag set to an effective depth of 52 ft. No portion of the wreck which had been demolished and apparently scattered, was hung during the present survey. Cleared wire-drag depths of 52 ft. over the contacts should be charted.

1232 1000 No corr

4. The 38-ft. sounding charted in lat. 35° 10.62' long. 75° 32.72', from advance information of H-8249 (1955), the smooth sheet and sounding volumes of which have not yet been received in the Washington Office, falls on the present survey in an area which was cleared by a wire-drag set to an effective depth of 46 ft. The 38-ft. sounding should be retained on the chart until after verification and review of survey

1233 No corr use CH 1233

not received in Washington 4/16/64 Helmer
pencil sdgs. on H 8249 are 43 + 44 ft.
38 appears to be erroneous
L.S.S. 4/11/65

H-8249, at which time the discrepancy can be resolved.

5. The 42-ft. sounding charted in lat. 35° 10.27', long. 75° 32.08', from H-1135 (1871-72), falls within an area on the present survey which is cleared by a wire-drag set to an effective depth of 46 ft. The charted 42-ft. is erroneous and instead should be 47 ft.

1232 1000 - use Ch 1233

6. The 54-ft. sounding charted in lat. 35° 08.72', long. 75° 21.02', from H-2471 (1901), falls within an area on the present survey which is cleared by a wire-drag set to an effective depth of 59 ft. The charted 54 ft. is erroneous and instead should be 59 ft.

1232 1000 use Ch 1233

The following buoys which were located on the present survey were deleted from chart 1232 subsequent to the present survey:

Buoy	Location		Authority
	Latitude	Longitude	
Buxton Wk. Lt. Bell	35° 09.88'	75° 18.04'	HON to M 41, 1955
Buxton WK Nun	35° 09.98'	75° 17.96'	HON to M 41, 1955
Diamond Wk Lt. Bell "10 A"	35° 10.68'	75° 21.26'	HON to M 34, 1955
Outer Shoal Wk	35° 01.75'	75° 29.39'	HON to M 34, 1955

Lighted Bell Buoy R "2" charted in lat. 35° 08.12', long. 75° 23.13', fell outside the limits of a wire-drag area during the present survey. The buoy was subsequently moved to its present location (HON to M 44, 1955), where it now falls inside the above-mentioned wire-drag area.

The Descriptive Report adequately covers all matters pertaining to the survey. No further discussion is considered necessary.

Reveiwed by: I. M. Zeskind
Sept. 6, 1957

Inspected by: R. H. Carstens

RHC

Form 712
(11-30-55)

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens 13 May 1957

Plane of reference approved in
16 volumes of sounding ~~records for~~ and wire drag records for

HYDROGRAPHIC SHEET 8351

Locality Cape Hatteras, N. C.

Chief of Party: J. C. Mathisson in 1955

Plane of reference is mean low water, reading

2.1 ft. on tide staff at Hatteras Inlet

7.6 ft. below B.M. 1 (1955)

Height of mean high water above plane of reference is 3.4 feet.

Condition of records satisfactory except as noted below:

NOTE:

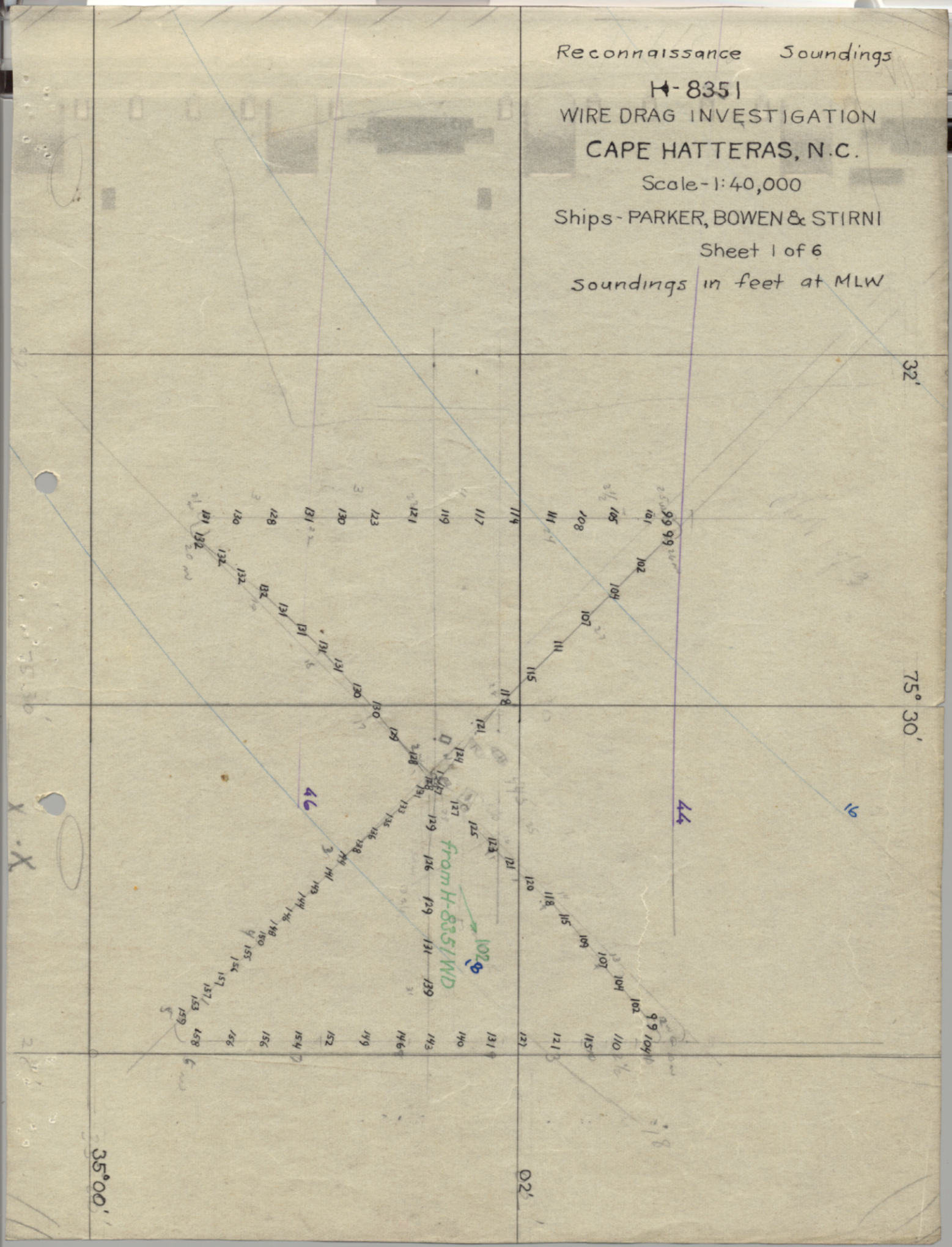
Tide reducers for the positions listed below have been revised in red and verified.

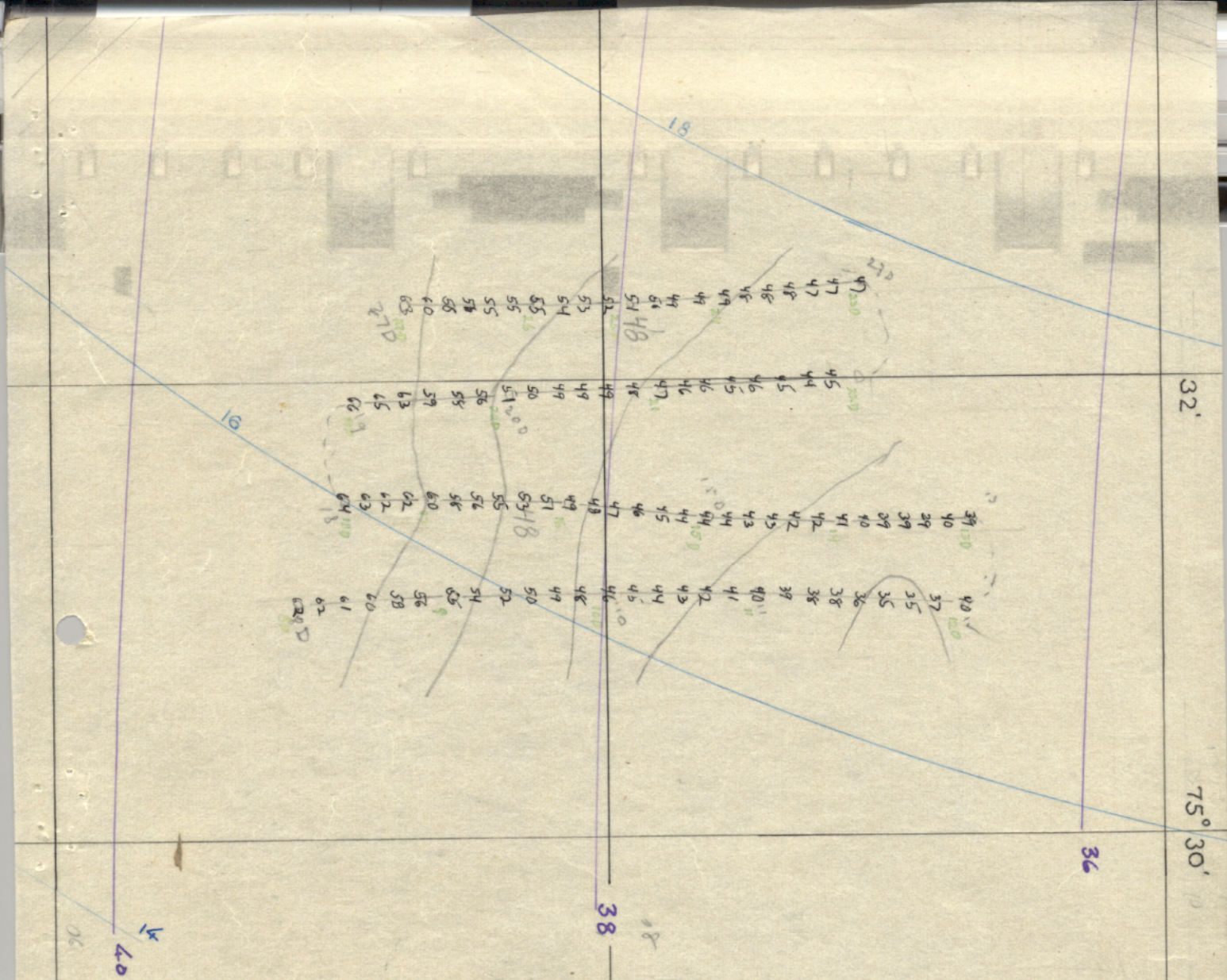
VOL.	POSITION
3	1c - 26c 1d - 78d

William Hofmann
Signature

Chief, Tides Branch

Comm-DC 34330


Reconnaissance Soundings
H-8351
WIRE DRAG INVESTIGATION
CAPE HATTERAS, N.C.
Scale - 1:40,000
Ships - PARKER, BOWEN & STIRNI
Sheet 1 of 6
Soundings in feet at MLW
32'
75° 30'
35°00'
02'
46
44
16
from H-8351 WD
102
18



H-8351

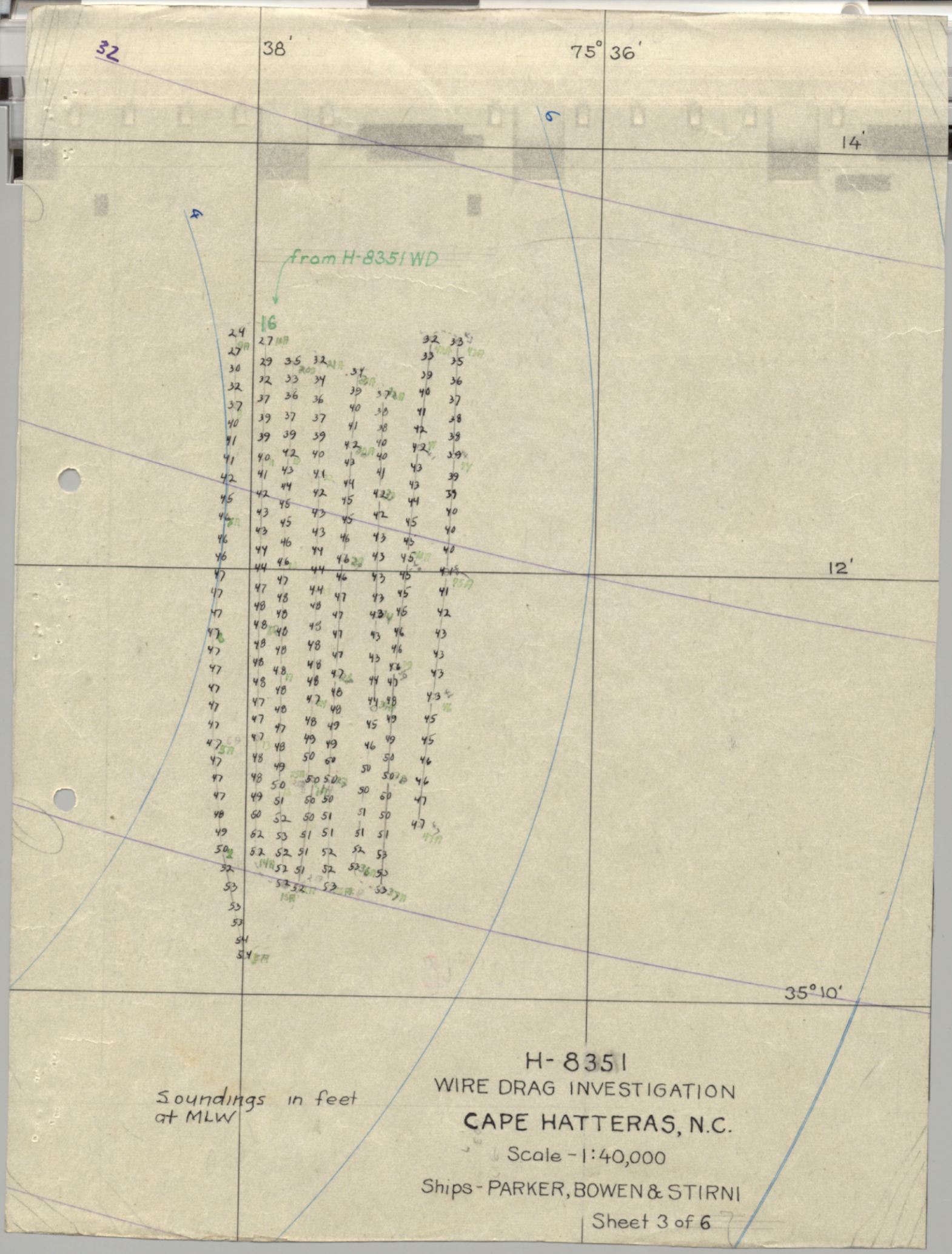
WIRE DRAG INVESTIGATION

CAPE HATTERAS, N.C.

Scale - 1:40,000

Ships - PARKER, BOWEN & STIRNI Sheet 2 of 6

Soundings in feet at MLW



Soundings in feet at MLW

H-8351

WIRE DRAG INVESTIGATION

CAPE HATTERAS, N.C.

Scale - 1:40,000

Ships - PARKER, BOWEN & STIRNI

Sheet 3 of 6

H-8351

WIRE DRAG INVESTIGATION

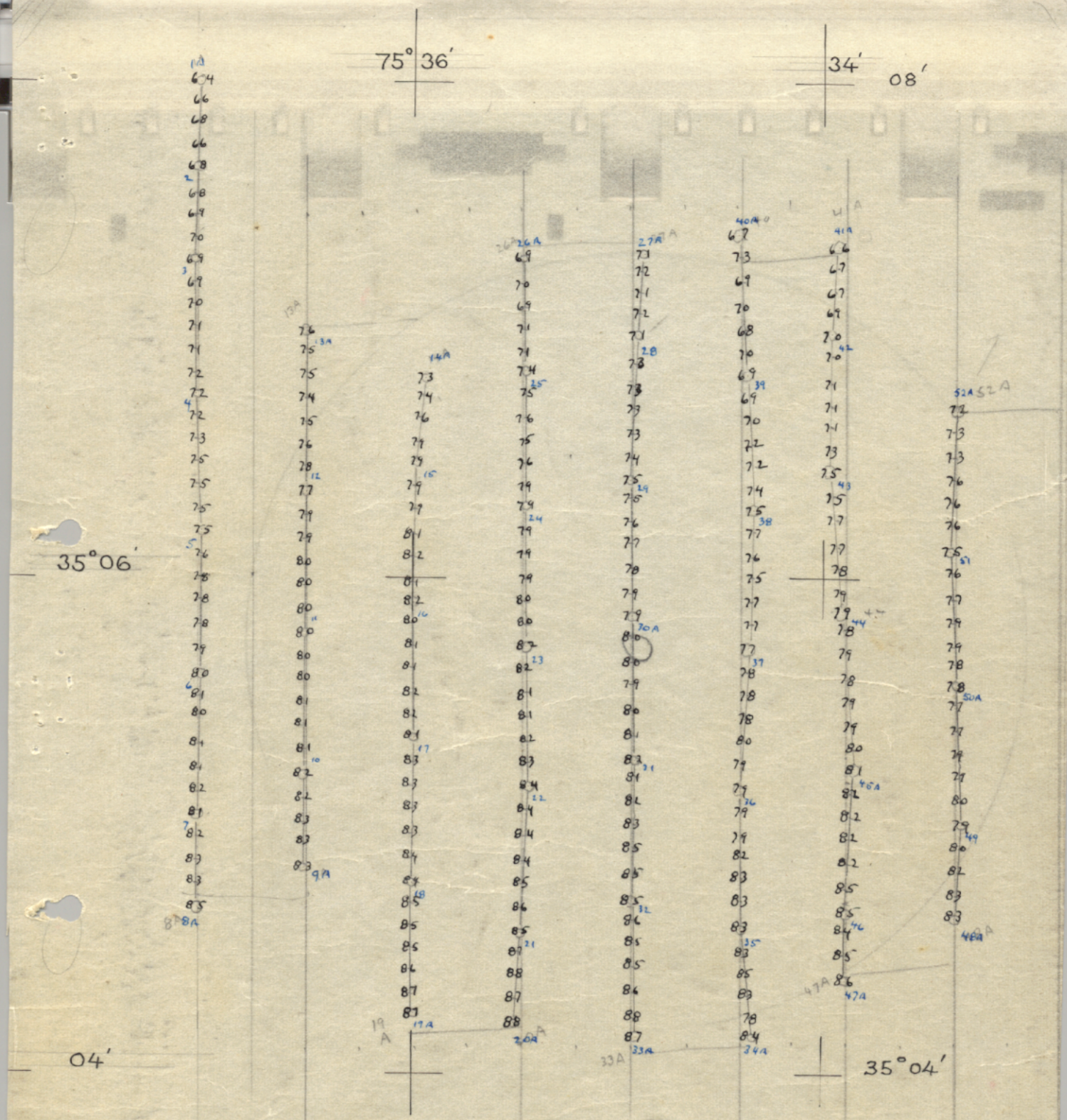
CAPE HATTERAS, N.C.

Scale-1:40,000

Ships-PARKER, BOWEN & STIRNI

Sheet 4 of 6

Soundings in feet at MLW



H-8351
WIRE DRAG INVESTIGATION
CAPE HATTERAS, N.C.

Scale: 1-40,000

Soundings in feet at MLW Sheet 5 of 6

35° 10'

08'

06'

H-8351

WIRE DRAG INVESTIGATION

CAPE HATTERAS, N.C.

Scale : 1-40,000

Soundings in feet at M.L.W.

Sheet 6 of 6

24'

22'

75° 20'

18'

HATTERAS ISLAND

CAPE HATTERAS

Frisco

Kings I

Brooks Pt

Bald Pt

Buxton

TANK

RADIO TOWER

TOWER
Aband. LH.

Fl 15sec
191ft 20M

TOWER
CG. No. 183

LORAN
TOWER

Cape Pt

Hatteras Bight

HATTERAS SHOALS

HATTERAS SLOUGH

DIAMOND SHOALS

INNER DIAMOND SHOAL

DIAMOND SLOUGH

OUTER DIAMOND SHOAL

ATLANTIC OCEAN

8351
W.D.

CAUTION
DANGER AREA
Unexploded depth charges in this area

MAGNETIC

VAR 6° 15' W (1956)

ANNUAL INCREASE 1'

DIAMOND
Occ 20sec 66 ft 14M
DIAPHONE DFS
R Rh 312
66m-10m & 30m-40m

R"2"
Qk Fl R BELL

wreck

Nautical Miles

Yards

(CONTINUED ON CHART 1110)

(CONTINUED ON CHART 1110)

75°30'

35°

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8351 W.D.

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
5/7/57	1000	H.W Burgoyne	Exam - No Correction Before ~~After~~ Verification and Review
6/18/57	1232	S.G.M. Gann	Before ~~After~~ Verification and Review
6/26/57	1109	SG McGann	Before ~~After~~ Verification and Review
7-11-57	1001	Chas R. Wittmann	Exam - no con. Before ~~After~~ Verification and Review
3/7/58	1110	SG McGann	~~Before~~ After Verification and Review Completely applied. - verified 4-16-58 jsw
3/24/58	1109	SGM.	~~Before~~ After Verification and Review
4/11/60	1232	Helmer	~~Before~~ After Verification and Review Fully applied
9/30/66	1001	W. H. Wall	~~Before~~ After Verification and Review Fully applied
3/4/68	1000	Svendsen	~~Before~~ After Verification and Review Fully app. Drg #44
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.